

Claims:

- 5 1. The use of water-redispersible dispersion powders based on one or more copolymers which are stabilized with at least one protective colloid in the production of composite thermal insulation systems, wherein the copolymer or copolymers contain(s) monomers containing carbonyl groups.
- 10 2. The use of water-redispersible dispersion powders as claimed in the preceding claim, wherein the monomers containing carbonyl groups have at least one carbonyl group selected from the group consisting of aldehyde and keto groups.
- 15 3. The use of water-redispersible dispersion powders as claimed in either of the preceding claims, wherein the monomers containing carbonyl groups are selected from the group consisting of acrolein, vinyl acetoacetate, allyl acetoacetate, diacetoneacrylamide, vinyl methyl ketone, acetoacetylated hydroxyalkyl acrylates and acetoacetylated hydroxyalkyl methacrylates.
- 20 4. The use of water-redispersible dispersion powders as claimed in any of the preceding claims, wherein the copolymer or copolymers contain(s) from 0.1 to 15% by weight, based on the total weight of the polymer, of monomers containing carbonyl groups.
- 25 5. The use of water-redispersible dispersion powders as claimed in any of the preceding claims, wherein the copolymer or copolymers comprise(s) at least one monomer selected from the group consisting of vinyl esters, vinylaromatics, acrylic esters, methacrylic esters, fumaric esters and maleic esters as base monomer.
- 30 6. The use of water-redispersible dispersion powders as claimed in any of the preceding claims, wherein the copolymer or copolymers comprise(s), in addition to the monomers mentioned, further monomers selected from the

group consisting of methacrylic and acrylic esters which are modified with epoxide groups or hydroxyl groups and the anhydrides of acrylic and methacrylic acids, the amides of acrylic and methacrylic acids and their isobutoxy ethers and n-butoxy ethers, ethylenically unsaturated monocarboxylic and dicarboxylic acids, their anhydrides and amides, ethylenically unsaturated sulfonic acids and their salts, vinylsulfonic acids, vinyl chlorides, monounsaturated or polyunsaturated olefins and acryloxypropyltri(alkoxy)silanes, methacryloxypropyltri(alkoxy)silanes, vinyltrialkoxysilanes.

7. The use of water-redispersible dispersion powders as claimed in any of the preceding claims, wherein the copolymer or copolymers is/are selected from the group consisting of

Vinyl ester-ethylene copolymers having an ethylene content of from 1 to 60% by weight,

Vinyl ester-ethylene-(meth)acrylic ester copolymers having an ethylene content of from 1 to 40% by weight and a (meth)acrylic ester content of from 0.1 to 30% by weight,

Vinyl acetate copolymers containing from 0 to 60% by weight of one or more monomers from the group consisting of vinyl esters,

Vinyl ester-(meth)acrylic ester copolymers comprising from 20 to 90% by weight of vinyl esters and from 0.1 to 50% by weight of one or more monomers from the group consisting of (meth)acrylic esters,

Vinyl ester copolymers with esters of fumaric or maleic acid, (Meth)acrylic ester copolymers based on one or more monomers from the group consisting of (meth)acrylic esters,

Styrene-(meth)acrylic ester copolymers having a styrene content of from 0.1 to 70% by weight,

Styrene-butadiene copolymers having a styrene content of from 1 to 70% by weight,

Vinyl chloride copolymers with vinyl esters and/or ethylene and/or (meth)acrylates.

- 5 8. The use of water-redispersible dispersion powders as claimed in any of the preceding claims, wherein a polyvinyl alcohol is present as protective colloid.
- 10 9. The use of water-redispersible dispersion powders as claimed in any of the preceding claims in the production of thermally insulating foam composite systems.
- 10 10. The use of water-redispersible dispersion powders as claimed in the preceding claim in the production of thermally insulating polystyrene board composite systems.
- 15 11. Adhesive comprising
from 5 to 80% by weight of fillers and/or lightweight fillers,
from 5 to 80% by weight of mineral binders,
from 0.5 to 50% by weight of dispersion powder which are stabilized with protective colloids and are used as claimed in any of claims 1 to 8 and
20 from 0.1 to 2% by weight of thickeners.